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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/750,308

12/31/2003

Michael O'Connor

P16604

9709

28062 7590 07/11/2007  
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EXAMINER

MITCHELL, JAMES M

ART UNIT

PAPER NUMBER

2813

MAIL DATE

DELIVERY MODE

07/11/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/750,308

Applicant(s)

O'CONNOR ET AL.

Examiner

James M. Mitchell

Art Unit

2813

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-10 and 16-29 is/are pending in the application.
- 4a) Of the above claim(s) 7-9 and 16-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 27 is/are rejected.
- 7) ☒ Claim(s) 5,6,10,28 and 29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

1. This office action is in response to applicant's remarks filed April 11, 2007.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Miyajima et al. (U.S. 2003/0136962).

4. Miyajima (e.g. Fig. 1, 2) discloses:

(cl. 1) a device comprising: a semiconductor substrate (14); a pixel cell array integrated (24; e.g. Fig. 1) with the semiconductor substrate; a liquid crystal layer (200) in contact with the pixel cell array (e.g. Fig. 2); a substantially transparent protective cover (500; Par. 0031) coupled to the liquid crystal layer; and a base (100) coupled to the semiconductor substrate wherein thermal expansion characteristics of the base are substantially similar to thermal expansion characteristics of the protective cover (e.g. both made from same material like glass; Par. 0031);

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over in Miyajima et al. (U.S. 2003/0136962)

7. Miyajima discloses the elements stated in paragraph 4 of this office action and further discloses that its protective cover and base are composed of the substantially the same material/ the same (glass) with the protective cover having a first thickness (Fig. 2), but does not appear to disclose the dimensions of its base having substantially the first thickness.

8. However, applicant has not disclosed that the thickness is for a particular unobvious purpose, produce an unexpected result, or are otherwise critical. As such, the selected dimension would have been obvious to one of ordinary skill in the art, since it has been held that mere dimensional limitations are prima facie obvious absent a disclosure that the limitations are for a particular unobvious purpose, produce an unexpected result, or are otherwise critical. See, for example, *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955); *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984); *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

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9. Claims 4 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over in Miyajima et al. (U.S. 2003/0136962) in combination with Sato et al. (U.S. 6,081,305).

10. Miyajima discloses the elements stated in paragraph 4 of this office action, but does not appear to disclose a chip carrier coupled to the base or use of an Ultra High Pressure light source to emit light a condenser lens to condense the light, a display device to receive the condensed light and to emit image light, the display device comprising: a projector lens or to project the image light.

11. However Sat utilizes a chip carrier (e.g. light device, 740 is not floating but connected/coupled to a carrier/ mounting surface via 550); an Ultra High Pressure light source to emit light (700; Fig. 18); a condenser lens (730) to condense the light; a display device (740) to receive the condensed light and to emit image light, the display device comprising: a projector lens (750) to project the image light.

12. It would have been obvious to one of ordinary skill in the art to incorporate the additional features above with the device of Miyajima in order to provide an image on a projection screen as taught by Sato (760).

***Allowable Subject Matter***

13. Claims 5, 6, 10, 28 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of newly added allowable subject matter: while the prior art teaches an electrode between a liquid crystal and protective cover as shown in Murade (U.S. 6,610,997), this is instances where single

pixels are formed semiconductor substrates that are formed as islands in contrast to where an array is formed on a single semiconductor substrate.

### ***Response to Arguments***

14. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Mitchell whose telephone number is (571) 272-1931. The examiner can normally be reached on M-F 8:00-4:00.

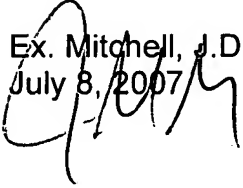
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Ex. Mitchell, J.D.  
July 8, 2007

A handwritten signature in black ink, appearing to be "J.D. Mitchell", written over the typed name and date.